IN THE SPECIFICATION:

On page 34, lines 10-19, please insert the following replacement paragraph:

HIV_{NL4-3} plasmid (a gift from Dr. P. Krogstad, UCLA, Los Angeles, Calif.), was transfected in HeLa cells using ~~Lipofectin~~LIPOFECTIN® transfection reagent (Gibco/BRL). Excess DNA was removed by washing and cells were co-cultured with H9 cells for 18 hours. The H9 cells were removed and re-cultured in growth medium. When the culture was 100% positive for HIV antigens by indirect immunofluorescence, the virus was inoculated onto H9 cells and incubated at 37°C for several weeks in the presence of 2 μM L-chicoric acid. When this culture was 100% positive the virus was isolated and one aliquot was passaged in a similar manner in 4 μM L-chicoric acid. Finally, virus was cultured in the presence of 8 μM L-chicoric acid and the resultant virus filter-clarified, aliquoted, and stored at -70°C.

On page 37, lines 12-19, please insert the following replacement paragraph:

Molecular clones of HIV included wild-type HIV_{NL4-3}, $HIV_{NL4-3\ M184V}$, and $HIV_{NL4-3\ JF26/A7}$. All three clones were a generous gift from P. Krogstad (UCLA, Los Angeles, Calif.). Viruses were initially, transfected in adherent HeLa cells using ~~Lipofectin~~LIPOFECTIN® transfection reagent. After 48 hours, H9 cells were added. Following 24 hours of co-culture, non-adherent cells were removed and cultured. Cells were monitored by indirect immunofluorescence and RT release as described below until the culture was 100% infected by HIV-1. Supernatant fluids were collected and clarified of cells by low-speed centrifugation followed by filtration through 0.45 μm filters.

On page 35, lines 3-28, please insert the following replacement paragraph:

The overall cloning and sequencing strategy is illustrated in FIG. 15. For cloning and sequencing, HIV from 10 ml of culture was centrifuged at 33,000 x g for 4 hours at 4°C. Virions were lysed and RNA isolated using ~~Purescript~~PURESCRIPT® RNA isolation reagent (Gentra, Frederick, Md.). Primers used to amplify cDNA under these conditions recognize the 5' and 3' ends of IN at nucleotide positions 3580-3605 ("INS" primer: 5'-ggtctccgcgggaatcaggaaagt- ac-3') and 4497-4522 ("INX" primer: 5'-gcttttctagaaatatacatatggtg-3') respectively, and generate a 943 base pair (bp) product. First strand synthesis using INX primer and ~~Superscript II~~ SUPERSCRIPT II®, an avian myeloblastosis virus RT (Gibco/BRL), was performed at -42°C

for 50 minutes according to manufacturer's instructions. Thirty-eight cycle amplification was performed using Pfu thermostable DNA polymerase (Stratagene, La Jolla, Calif.) according to manufacturer's instructions. Optimum Mg^{++} concentration for these studies was determined to be 1 mM. Conditions for polymerase chain reaction were: 96°C for one minute, 40°C for 30 seconds, 72°C for 2 minutes for the first two cycles followed by 96°C for one minute, 55°C for one minute and 72°C for 3 minutes for thirty-six cycles. The final cycle included a 10-minute, 70°C elongation step. The resulting reverse transcriptase polymerase chain reaction (RT-PCR) products were separated by agarose gel electrophoresis and visualized by ethidium bromide staining. Appropriately sized products were eluted from the gel and blunt-end ligated into ~~PCRScript~~PCRSCRIPT® cloning vector (Stratagene) for dideoxynucleotide sequencing using ~~Sequenase II~~ SEQUENASE II® sequencing enzyme (US Biochemical, Cleveland, Ohio) according to manufacturer's instructions. The entire integrase sequence was determined through the use of six oligonucleotide primers: INS, INX, Core 1,5'-cagctgtgataaatgtcagcta-3' (nt3721-3741), Core 2: 5'-ccatttgtactgctgtcttaa-3' (nt4122-4142), INSPF: 5'-gcaatttcaccagtactacagt-3' (nt3962-3983), and INSPR: 5'-gtagggaatgccaaattcctg-3' (nt4016-4036). Manual sequence analysis was confirmed by automated DNA sequencing.

On page 40, lines 14-19, please insert the following replacement paragraph:

ZDV was purchased from Sigma Chemical Company (St. Louis, Mo.) and was reconstituted with cold deionized water to a final concentration of 1 mM. Protease inhibitor (PI) (AG1350) (Agouron Pharmaceuticals, La Jolla, Calif.) and reconstituted in 14% ethanol/37.5% DMSO/48.5% H_2O to a final concentration of 7 mM. AG1350 is slightly (less than 10-fold) less active than the recently FDA-approved PI, ~~Viracept~~VIRACEPT® HIV protease inhibitor. The L-CCA was dissolved in H_2O to a final concentration of 2.1 mM.